REMARKS

In the non-final Office Action dated November 7, 2005, the Examiner rejects claims 1, 18-20, 22, 29, 30, and 32 under 35 USC §103(a) as being unpatentable over Sato et al. (US Patent No. 5,566,174) in view of Fimoff et al. (US Patent No. 5,905,732). The Examiner objects to claims 2-17, 21, 23-28, 31, and 33-39 as being dependent on a rejected base claim and allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims.

By way of the present amendment, Applicants amend claims 1-7, 12-19 and 21-38 to improve form. No new matter has been added by way of the present amendment. Claims 1-39 are pending.

Before addressing the 35 USC §103(a) rejections and the Examiner's claim objections, Applicant respectfully notes that the Office Action Summary indicates that claim 2 is rejected; however, claim 2 is not discussed in connection with the 35 USC §103(a) rejections in the Office Action (e.g., Office Action, page 2). Moreover, claim 2 is identified as an objected to claim on page 4 of the Office Action. Applicant assumes that the Examiner intended to identify claim 2 as being objected to on the Office Action Summary.

Applicant further notes that claim 31 is not identified on the Office Action Summary. In the Office Action, claim 31 is identified as being objected to (Office Action, page 4). Applicant assumes that the Examiner intended to list claim 31 as being objected to on the Office Action Summary.

Claim Objections

Claims 2-17, 21, 23-28, 31, and 33-39 are objected to as being dependent on a rejected

base claim, but allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims (Office Action, page 4).

Applicant has amended claim 2 to include the features of its respective base claim and any intervening claims. For at least these reasons, Applicant respectfully submits that claims 2-17 are in condition for allowance.

Applicant has amended claim 21 to include the features of its respective base claim and any intervening claims. Therefore, Applicant believes that claims 21-28 are in condition for allowance.

<div align="center">35 USC §103(a) Rejections</div>

Claims 1, 18-20, 22, 29-30, and 32 stand rejected under 35 USC §103(a) as being unpatentable over Sato in view of Fimoff. Applicant traverses the rejection of claims 1, 18-20, 22, 29-30, and 32 for at least the reasons presented hereinbelow.

Claim 1 is directed to a method of adapting an effective rate of an MPEG transport stream originating with an incoming rate to a payload rate, the stream having a sequence of MPEG packets, the method comprising maintaining identifiers that identify MPEG packets that can be discarded; altering timing information in the MPEG packets that bear the timing information; inserting stuffing packets into the MPEG transport stream when the incoming rate is less than the payload rate; and discarding certain packets from the MPEG transport stream using at least one of the identifiers when the incoming rate is greater than the payload rate. Sato and Fimoff, alone or in any reasonable combination, do not disclose or suggest at least one of these features.

For example, claim 1 recites maintaining identifiers that identify MPEG packets that can

be discarded. Sato and Fimoff, alone or in combination, do not disclose or suggest maintaining identifiers that identify MPEG packets that can be discarded, as required by claim 1. Moreover, Sato and Fimoff do not disclose or suggest other features of claim 1.

For example, claim 1 recites inserting stuffing packets into the MPEG transport stream when the incoming rate is less than the payload rate. Sato and Fimoff, alone or in combination, do not disclose or suggest this feature of claim 1. Moreover, Sato and Fimoff do not disclose or suggest still other features of claim 1.

For example, claim 1 recites discarding certain packets from the MPEG transport stream using at least one of the identifiers when the incoming rate is greater than the payload rate. Sato and Fimoff, alone or in combination, do not disclose or suggest this feature of claim 1.

The Applicant notes that the Examiner rejects claim 1 as being a method claim corresponding to the system claim of claim 19. Applicant disagrees with the Examiner's characterization of claim 1. For example, contrary to the Examiner's allegation, claim 1 does not include method steps that correspond to the features of claim 19.

In any event, as discussed above, neither Sato or Fimoff disclose maintaining identifiers that identify MPEG packets that can be discarded, inserting stuffing packets into the MPEG transport stream when the incoming rate is less than the payload rate, or discarding certain packets from the MPEG transport stream using at least one of the identifiers when the incoming rate is greater than the payload rate.

Claim 18 stands rejected under 35 USC §103(a) as being unpatentable over Sato in view of Fimoff. Claim 18 has been amended to depend from claim 2. Claim 2 is amended to include the features of claim 1, thus overcoming the Examiner's objection to claim 2. For at least these

reasons, Applicant believes claim 18 is allowable. Applicant respectfully requests that the 35

USC §103(a) rejection of claim 18 be reconsidered and withdrawn and that this claim be

allowed.

Claim 19 is directed to a system of adapting an effective rate of an MPEG transport

stream originating with an incoming rate to a payload rate, the stream having a sequence of

MPEG packets. Claim 19, as amended, recites that the system comprises logic configured to

assign identifiers that identify MPEG packets that can be discarded; a timing information

detection mechanism to determine if the packets include timing information; a timing

information altering mechanism configured to alter timing information in packets containing

timing information; a one-packet buffer accepting the MPEG packets from the stream; a FIFO

configured to receive altered timing information, the FIFO further configured to receive packets

from the one-packet buffer and to output packets at the payload rate, the FIFO including a

watermark; and an instantaneous transfer mechanism coupled between the one-packet buffer and

the FIFO, the transfer mechanism forwarding a packet from the one-packet buffer when a first

condition is present, stuffing a NULL packet into the FIFO when a second condition is present,

or dropping the packet based on one of the identifiers when a third condition is present. Sato and

Fimoff do not disclose or suggest each of these features.

The Examiner admits that Sato does not expressly disclose a one-packet buffer accepting

MPEG packets one packet at a time (Office Action, page 3). The Examiner relies on Fimoff for

curing the shortcomings of Sato with respect to this feature. For example, the Examiner alleges

that Figure 6 of Fimoff discloses a one-packet buffer to allow time for PCR packet extraction,

correction and replacement (Office Action, page 3). Col. 8, line 66 to col. 9, line 8 describes the

one-packet buffer shown in Figure 6, of Fimoff.

Col. 8, line 66 to col. 9, line 8, of Fimoff, discloses:

The plurality of FIFOs 12-42 supply MPEG data packets (including PCR packets) to the common multiplex data stream 75, via a one packet buffer 37, to the A input of a selector 39. The buffer 37 introduces a one packet delay so that the PCR time base may be extracted by a PCR extractor 38, corrected as will be seen, and inserted in the PCR packet as the PCR packet is being sent out on the common data stream 75. It should be noted that all of the data packets pass through buffer 37 and selector 39, but only the PCR packets are modified.

This portion of Fimoff discloses that the one-packet buffer 37 outputs information to the A input of a selector 39. As shown in Figure 6, one-packet buffer 37 is located at the output of FIFO 12-42. In contrast, the one-packet buffer recited in claim 19 receives packets from an MPEG stream and makes the packets available to the FIFO. For at least these reasons, Fimoff does not cure the shortcomings of Sato with respect to claim 19. Applicant respectfully requests that the 35 USC §103(a) rejection of clam 19 in view of Sato and Fimoff be reconsidered and withdrawn. Allowance of claim 19 is respectfully requested.

Claim 20 depends from claim 19 and is believed allowable for at least the reasons presented with respect to claim 19. Applicant respectfully requests that the 35 USC §103(a) rejection of claim 20 be reconsidered and withdrawn. Allowance of claim 20 is respectfully requested.

Claim 22 is amended to depend from claim 21. Claim 21 is amended to include the limitations of claims 19 and 20 thus placing claim 21 into allowable form (Office Action, page 4). For at least these reasons, Applicant respectfully requests that the 35 USC §103(a) rejection of claim 22 be reconsidered and withdrawn. Applicant respectfully requests allowance of claim 22.

Claim 29 is directed to a system of adapting an effective rate of an MPEG transport stream originating with an incoming rate to a payload rate, the stream having of a sequence of MPEG packets, the system comprising a timing information altering mechanism configured to alter timing information in packets containing timing information; a FIFO to output packets at the payload rate, the FIFO including a watermark; a buffer to accept the MPEG packets from the stream; an instantaneous transfer mechanism coupled between the buffer and the FIFO, the mechanism to forward a packet from the buffer to the FIFO when a first condition is present or to stuff a NULL packet into the FIFO when a second condition is present; and a mechanism to discard a packet in the buffer when a third condition is present, the discarded packet not forwarded to the FIFO. Sato and Fimoff, alone or in any reasonable combination, do not disclose or suggest each of these features.

For example, Sato and Fimoff do not disclose an instantaneous transfer mechanism coupled between the buffer and the FIFO, the mechanism to forward a packet from the buffer to the FIFO when a first condition is present or to stuff a NULL packet into the FIFO when a second condition is present, as required by claim 29. Moreover, Sato and Fimoff do not disclose or suggest other features of claim 29.

For example, Sato and Fimoff do not disclose or suggest a mechanism to discard a packet in the one-packet buffer when a third condition is present, the discarded packet not forwarded to the FIFO, as further required by claim 29. For at least these reasons, Sato and Fimoff do not disclose or suggest each of the features of claim 29.

In view of the foregoing remarks, Applicant respectfully requests that the 35 USC §103(a) rejection of claim 29 in view of Sato and Fimoff be reconsidered and withdrawn.

Applicant respectfully requests allowance of claim 29.

Claims 30-39 depend, directly or indirectly, from claim 29 and are believed allowable for at least the reasons presented with respect to claim 29. Reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 30-39 is respectfully requested. Allowance of claims 30-39 is respectfully requested.

Conclusion

In view of the foregoing amendment and remarks, Applicant respectfully requests the

Examiner's reconsideration of the application and the timely allowance of the present

application. All claims are believed allowable in view of the amendment above.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess

fees to such deposit account.

Respectfully submitted,

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